

M25a **Is Hinode witnessing the “turbulent” fields traced by the Hanle effect?**

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It is believed that the Solar surface (photosphere) is permeated by small-scale, tangled magnetic field structures. Small-scale meaning lengths much smaller than the resolution element. Diagnostics based upon the Zeeman effect on spectral lines have the disadvantage that when the field structures are not spatially resolved their polarization signals suffer from cancelation effects, thus impeding reliable measurements of the photospheric magnetic flux. The existence of randomly-oriented fields within the resolution element has been suggested from analyses of spectral lines via the Hanle effect, sensitive to the presence of tangled fields within sub-resolution scales. Latest measurements indicate that the average field strength in the quiet Sun is of the order of 100 G. In this contribution I compare results from the analysis of spectropolarimetric data taken with the Solar Optical Telescope onboard Hinode with those coming from the Hanle measurements. It turns out that current flux estimates from Hinode observations are surprisingly close to Hanle measurements.